

**IN THE CLAIMS:**

Please cancel claim 14 without prejudice.

- 1 1. (Currently Amended) A system comprising:  
2 a plurality of network resources ~~adapted~~ configured to process received block-  
3 based protocol data access requests; and  
4 a plurality of virtual servers each ~~comprising~~ allocated a logical partitioning of the  
5 network resources to establish an instance of a multi-protocol server, each virtual server  
6 configured to service the block-based data access requests by converting the block-based  
7 protocol requests to appropriate file system data requests, each virtual server further  
8 configured to ~~allowed shared share~~ access to resources of the file system; and  
9 ~~a context data structure provided to each virtual server; associated with a the~~  
10 context data structure including information pertaining to a security domain of the that  
11 virtual server for each supported access protocol, to enable controlled access to the  
12 allocated and shared resources of the file system that virtual server.
- 1 2. (Original) The system of claim 1 wherein the network resources comprise  
2 network interfaces assigned to one or more network address resources.
- 1 3. (Previously Presented) The system of claim 1 further comprising storage media  
2 configured to store information as units of storage resources, the units of storage  
3 resources allocated among each of the virtual servers.
- 1 4. (Original) The system of claim 3 wherein the units of storage resources comprise  
2 volumes.
- 1 5. (Original) The system of claim 3 wherein the units of storage resources comprise  
2 qtrees.

1 6. (Previously Presented) The system of claim 3 further comprising an operating  
2 system having a file system resource adapted to perform a boundary check to verify that a  
3 request is allowed to access certain units of the storage resources on the storage media,  
4 each virtual server allowed shared access to the file system and further adapted to create  
5 virtual disks within the units of storage resources and wherein each of the virtual disks  
6 associated with one or more of the virtual servers.

1 7. (Previously Presented) The system of claim 6 wherein the operating system  
2 further comprises a user interface having a command set adapted to operate on virtual  
3 disks, and wherein the command set executes within a context of a virtual server.

1 8. (Original) The system of claim 7 wherein the user interfaces comprises a  
2 command line interface (CLI) adapted to support the command set.

1 9. (Previously Presented) The system of claim 8 wherein the CLI comprises a lun  
2 command adapted to perform operations to a virtual disk associated with the context of  
3 the virtual server.

1 10. (Previously Presented) The system of claim 9 wherein the lun command creates a  
2 logical unit number on a file system associated with the server, the logical unit number  
3 being associated with the context of the virtual server.

1 11. (Original) The system of claim 8 wherein the CLI comprises an igroup command  
2 that generates a set of file system primitive for binding an initiator group to one or more  
3 initiator addresses and wherein the initiator group is associated with the context of the  
4 virtual server.

1 12. (Original) The system of claim 1 wherein the block-based protocol comprises  
2 iSCSI.

1 13. (Original) The system of claim 1 wherein the block-based protocol comprises  
2 FCP.

1 14. (Cancelled).

1 15. (Original) The system of claim 1 wherein the multi-protocol server is further  
2 adapted to process data access requests in response to one or more file-level protocols.

1 16. (Currently Amended) A method for implementing a virtual server, the method  
2 comprising the steps of:  
3 ~~adapting~~ configuring a plurality of network resources to process received block-  
4 based protocol data access requests;  
5 allocating logical partitions ~~partitioning~~ of the network resources to establish a  
6 plurality of virtual servers, ~~each comprising as an~~ instances of a multi-protocol server  
7 configured to service the block-based data access requests by converting the block-based  
8 protocol requests to appropriate file system primitives; and  
9 providing a context data structure to each virtual server, the context data structure  
10 including information pertaining to a security domain of ~~the~~ that virtual server ~~for each~~  
11 ~~supported access protocol~~, to enable controlled access to the allocated and shared  
12 resources of ~~the file system~~ that virtual server.

1 17. (Previously Presented) The method of claim 16 further comprising the step of  
2 configuring storage media to store information as units of storage resources, the units of  
3 storage resources allocated among each of the virtual servers.

1 18. (Original) The method of claim 17 wherein the units of storage resources  
2 comprise volumes.

1 19. (Original) The method of claim 17 wherein the units of storage resources  
2 comprises qtrees.

1 20. (Currently Amended) A computer readable medium containing executable  
2 program instructions ~~for implementing a virtual server, the executable program~~  
3 ~~instructions comprising program instructions for executed by a process, comprising:~~  
4 program instructions that configure ~~adapting~~ a plurality of network resources to  
5 process received block-based protocol data access requests;  
6 program instructions that allocate logical partitions ~~partitioning~~ of the network  
7 resources to establish a plurality of virtual servers, ~~each comprising as an~~ instances of a  
8 multi-protocol server configured to service the block-based data access requests by  
9 converting the block-based protocol requests to appropriate file system primitives; and  
10 program instructions that provide ~~providing~~ a context data structure to each  
11 virtual server, the context data structure including information pertaining to a security  
12 domain of ~~the~~ that virtual server ~~for each supported access protocol,~~ to enable controlled  
13 access to the allocated and shared resources of ~~the file system~~ that virtual server.

1 21-23. (Cancelled).

1 24. (Currently Amended) A method, comprising:  
2 receiving a block-based data access request from a client;  
3 forwarding the request to a virtual server;  
4 performing security checks on the request using a context data structure provided  
5 to each virtual server, the context data structure including information pertaining to a  
6 security domain of ~~the~~ that virtual server ~~for each supported access protocol,~~ to enable  
7 controlled access to ~~the~~ allocated and shared resources of ~~the file system~~ that virtual  
8 server;  
9 converting the received block-based data access request to a file system data  
10 access request;  
11 in the event that the request passes the security checks, servicing the file system  
12 data access request to generate a response; and  
13 forwarding the generated response to the client.

1 25. (Currently Amended) A system, comprising:  
2 a network interface to receive a block-based data access request from a client;  
3 the network interface to forward the request to a virtual server;  
4 the operating system to perform security checks on the request using a context  
5 data structure provided to each virtual server, the context data structure including  
6 information pertaining to a security domain of ~~the~~that virtual server ~~for each supported~~  
7 ~~access protocol~~, to enable controlled access to ~~the~~allocated and shared resources of ~~the~~  
8 ~~file system~~that virtual server;  
9 in the event that the request passes the security checks, a process to convert the  
10 received block-based data access request to a file system data access request;  
11 the process to service the file system data access request to generate a response;  
12 and  
13 the process to forward the generated response to the client.

1 26. (Currently Amended) A computer readable media, ~~comprising:~~  
2 ~~—said computer readable media~~ containing program instructions for  
3 ~~execution~~executed by on a processor, ~~for the practice of a method, the method~~  
4 comprising:  
5 program instructions that receive ~~receiving~~ a block-based data access request from  
6 a client;  
7 program instructions that forward ~~forwarding~~ the request to a virtual server;  
8 program instructions that perform ~~performing~~ security checks on the request using  
9 a context data structure provided to each virtual server, the context data structure  
10 including information pertaining to a security domain of ~~the~~that virtual server ~~for each~~  
11 ~~supported access protocol~~, to enable controlled access to the shared resources of the file  
12 system;  
13 program instructions that convert ~~converting~~ the received block-based data access  
14 request to a file system data access request;

15           ~~program instructions that service in the event that the request passes the security~~  
16 ~~checks, servicing~~ the file system data access request to generate a response in the event  
17 that the request passes the security checks; and  
18           forwarding the generated response to the client.